Notes to Shortages and Surpluses Worksheet.docEGR 4

Notes to the "Worksheet for Calculating Shortages or Surpluses of One Occupation"

1) Regarding *Demand Side* data, we used SSI Toolkit file *egr4projections.xls*. For each occupation we compared Base Year 2002 employment data with Projected Year 2012 data. We calculated each of the three the key industry's share of the total number of workers employed in the critical occupations in all industries. We distributed the difference between base year and projected year employment over the10-year period by straight-line method to establish the middle projection. We applied a factor of 0.9 to create the lower projection and a factor of 1.1 to create the lower projection. We assumed stable employment levels within our key industries and their critical occupations during the period 2006—2012.

2) *Supply Side (Production)* data was generated from contacts with Ivy Tech regional campuses in Lafayette, Kokomo, and Logansport. We received enrollment information on courses related to the occupation/skills we deemed critical. These included most of the Technology Division courses with the exception of automotive, chemical and forensic lab, architectural, design, and computer graphics courses. We included enrollment data from Ivy Tech's Corporate and Continuing Education Services Division in credit and non-credit courses related to our selected occupations/skills.

We also received data from Purdue's West Lafayette and Kokomo campuses regarding enrollment in Electrical & Computer Technology, Industrial Technology, and Mechanical Engineering Technology. We chose to disregard enrollment data from Organizational Leadership and Supervision for the time being. We found it difficult to sort out of that large enrollment base those students most likely to become employed in manufacturing.

In deciding how to apply this information to the supply side question, we had to make many assumptions that we will need to revisit during the Root Causes and Regional Solutions phases of SSI. Our assumptions included the percentage of enrollees who would graduate and/or remain in their current programs and the percentage of two- or four-year completers who would seek or accept jobs in EGR 4. We have assumed that 67% of current enrollees will remain in and complete their current plans of study. And we have assumed that 33% of Purdue graduates and 67% of Ivy Tech graduates will remain in EGR 4.

Even with this rather coarse analysis, the supply of workers from post-secondary sources will not necessary translate into the EGR 4 demand occupations that do not require two- or four-year degree or pay accordingly. Knowing this we tended to weigh more heavily the enrollment figures from Ivy Tech certificate programs and non-credit courses..

3) Regarding *Supply Side (Migration)*, we have only anecdotal information at this time. We know, for example, that EGR 4 attracts workers from the Chicago-Gary area when there is an up-tick in employment, as has happened recently at Wabash National. We know, on the other hand, that we lose skilled manufacturing workers when there is demand elsewhere, e.g., Toyota in Princeton has taken employees from SIA. We also know that the spouses of newly hired Purdue facility and staff bring needed manufacturing skill to the region.

We have not yet, however, been Notes to Shortages and Surpluses Worksheet.docable to quantify the in- and out-migration phenomenon sufficiently to say that there is a net increase or decrease. Therefore, we assume no net effect of migration on labor supply.